



SEDIMENT SAMPLE LOCATIONS WITHIN 70116



## Department of Environmental Quality Office of Environmental Assessment

## OVERVIEW OF POST-KATRINA DATA FOR ZIP CODE 70116

The sediment and/or soil within the area flooded by Hurricane Katrina were tested to determine if there were contaminants present that might pose a risk to residents or the environment. Samples were collected at six locations within the zip code. Testing results indicated a variety of chemicals were present in the sediment/soil. These chemicals included primarily metals, petroleum hydrocarbons (such as diesel and oil), and pesticides that were used years ago (such as DDT, dieldrin, and aldrin). The presence of these chemicals is not surprising since metals are found naturally in the soil and petroleum products and pesticides are commonly used in every day life and, therefore, are present in our environment. The most significant findings of the sediment/soil testing are summarized below.

- Metals. Overall, the concentrations of the metals detected in the sediment/soil were below levels of concern. The only exceptions were arsenic and lead. In general, arsenic was present in the sediment/soil at levels that are found naturally in the soil. However, at one of the locations sampled, arsenic was slightly higher than these levels. This is not uncommon since arsenic is found in many commonly used products such as pesticides, herbicides, fertilizers, potting soil, and wood preservatives. Lead was found to be present at levels below the level of concern for residential areas with the exception of three locations. Elevated levels of lead in soil are often associated with the past use of leaded-gasoline (automobile exhaust), lead-based paints, and pesticides.
- Petroleum Hydrocarbons. Diesel and oil-type petroleum hydrocarbons were found at the majority of the locations sampled. Polycyclic aromatic hydrocarbons (PAH) (chemicals found in petroleum products, exhaust from automobiles, asphalt, etc.) were also found in the sediment/soil at some locations. The levels of these chemicals were below the level of concern except at three locations. These elevated levels of petroleum-related chemicals are likely attributable to surface runoff from roadways and parking lots in combination with releases of petroleum products from vehicles submerged under floodwaters. Petroleum products naturally break down in the environment and it is expected that the concentrations of these chemicals will decrease to pre-Katrina levels over time.
- <u>Pesticides</u>. Pesticides were found at the majority of locations sampled but in all cases the concentrations were below the level of concern.

The sediment/soil testing results show little to no health risk in the areas impacted by Hurricane Katrina. In addition, sediments are no longer present at many of the locations that were sampled early after the floodwaters receded. Therefore, exposure to the sediment/soil is not expected to result in long-term health effects if people avoid obvious signs of hazardous materials, practice good personal hygiene, and use common sense. Some people may suffer from short-term effects related to dust, pollen and mold – which are prevalent because of the flooding and time of year. Three locations within the zip code have been identified for further sediment/soil evaluation and possible re-sampling.

Post-Katrina air monitoring results indicate that the concentrations of chemicals and particulate matter in the air have been, and continue to be, below state and federal health-based regulatory levels.